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(54)INK JET RECORDING HEAD

(57)Abstract:

PURPOSE: To form an image by discharging ink in an ink chamber from a nozzle plate by arranging a material which undergoes a volume change associated with a phase transfer from antiferromagnetic to ferromagnetic as an actuator in a pressure conveying liquid chamber, causing a phase-transition material to change in volume, making the diaphragm to be displaced by conveying the volume change to the diaphragm through a pressure transfer liquid.

CONSTITUTION: A material 23 which changes in volume in association with a phase transition from antiferromagnetic to ferromagnetic is placed in a pressure transfer liquid chamber 22 as an actuator, the volume change of the material 23 is conveyed to a diaphragm 24 through the pressure transfer

liquid, and the diaphragm 24 is displaced to discharge ink in the ink chamber 25 from a nozzle 27 of a nozzle plate 26.

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